

ADAPTIVE POWER AMPLIFIER

ABSTRACT

Power detectors sense load mismatch conditions and cause the power output of a power amplifier to be reduced in response to a load mismatch. Transmitted and reflected power measurements are used to calculate a load mismatch criterion. A power amplifier is configured based on the calculated load mismatch criterion. A dual-directional coupler may be used to separate a power signal into transmitted and reflected components. With output power reduced under load mismatch conditions, signal distortion levels may be reduced to acceptable levels.